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EXAMINER

HUYNH, LOUIS K

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This office action is responsive to the amendment filed on 01/15/2009.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 7, lines 4-5: “the transporting path of the wrapping sheet” lacks proper antecedent basis.
- Claim 7, line 10: “the periphery surface of the transit aperture” lacks proper antecedent basis. Note that an aperture does not inherently comprise a periphery surface.
- Claim 7, line 10: “the transverse direction” lacks proper antecedent basis.
Furthermore, it is unclear as to what transverse direction applicant is referring.
- Claim 7, line 17: “the transverse direction of the work piece” lacks proper antecedent basis.
- Claim 8, line 3: “the inner surface of the transit aperture” lacks proper antecedent basis. Note that an aperture does not inherently comprise an inner surface.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Boriani et al. (US 5,782,063).

- With respect to claim 7, Boriani discloses a wrapping machine (1) that meets all of applicant's claimed subject matter, in particular, the wrapping machine of Boriani comprises: a wrapping sheet supply device (19) for guiding a wrapping sheet (4) onto a path (11) intersecting a path (9) of an advancing work piece (3), a delivery guide device (33) having a transit aperture defined by upper & lower walls (45) and side walls (44), a spreading guide (convex portion 45a) provided on each of the upper & lower walls (45) of the transit aperture for gradually smoothing the wrapping sheet (4) as the work piece (3) is pushed through the transit aperture of the delivery guide device (33). Note that the spreading guide (convex portion 45a), including a center area of the spreading guide, of the transit aperture protrudes from a downstream end toward the upstream end along the path (9) of the work piece (3).

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani et al. (US 5,782,063) in view of Jackson (US 2,098,245).

- With respect to claim 8, the wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of smoothing pads formed by a plurality of bristles. It is known in the art that brush has been used for spreading wrapping sheet over a work piece in order to remove air trapped between the wrapping sheet and the work piece. Jackson discloses and old and well known wrapping machine that utilizes a brush (14) for spreading wrapping sheet (16) over a work piece (1) in order to remove air between the wrapping sheet (16) and the work piece (1). Therefore, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have modified the wrapping machine of Boriani by having provided a brush in each of the upper & lower walls (45), as taught by Jackson, in order to spread the wrapping sheet over the work piece so as to remove air between the wrapping sheet and the work piece on both upper and lower faces of the work piece.

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8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani et al. (US 5,782,063) in view of Bronander (US 2,155,398).

- With respect to claim 9, the wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of a correction guide upstream of the delivery guide device that elastically presses the work piece. It is well known in the art that work piece being conveyed into wrapping machine should be properly aligned by guide elements; for example, Bronander disclose a wrapping machine comprising a support surface "A" for supporting a work piece "X" to be wrapped, guide elements mounted on the support surface "A" for guiding the work piece "X" as the work piece is pushed by a pushing element (36) into the wrapping machine such that the work piece is properly aligned when entering the wrapping machine. It is also known in the art that such guide elements are resiliently mounted to the support surface so as to provide close tolerance without causing too much friction between the guide elements and the work piece in order to ensure the proper alignment of the work piece. Therefore, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with guide elements upstream of the delivery guide device, as taught by Bronander, in order to ensure proper alignment of the work piece as the work piece is delivered into the delivery guide device.

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9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245) as applied to claim 8 above; and further in view of Bronander (US 2,155,398).

- With respect to claim 10, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of a correction guide upstream of the delivery guide device that elastically presses the work piece. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the modified wrapping machine of Boriani with guide elements upstream of the delivery guide device in order to ensure proper alignment of the work piece as the work piece is delivered into the delivery guide device for the same reason as applied to claim 9 above.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Le Clair (US 2,597,877).

- With respect to claim 11, the wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. It is known in the art that wrapping material such as plastic film web has a tendency of wrinkling or reducing width due to longitudinally pulling of the material. It is also well known in the art that suction belts are used in handling plastic film web, where the suction belts are arranged such that the spacing between the suction

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belts gradually separates in order to keep the web wrinkle-free and to restore its original width. Le Clair discloses a web handling device that includes a plurality of suction belts (22) for spreading the wrinkled web (11) to its original width; wherein the suction belts (22) are set at an acute angle relative to the direction of travel of the web. Therefore, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle, as taught by Le Clair, in order to spread the wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245) as applied to claim 8 above; and further in view of Le Clair (US 2,597,877).

- With respect to claim 12, the modified wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. However, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle in order to spread the wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece for the same reason as applied to claim 11 above.

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12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani et al. (US 5,782,063) in view of Bronander (US 2,155,398) as applied to claim 9 above; and further in view of Le Clair (US 2,597,877).

- With respect to claim 13, the modified wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. However, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle in order to spread the wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece for the same reason as applied to claim 11 above.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Bronander (US 2,155,398) as applied to claim 10 above; and further in view of Le Clair (US 2,597,877).

- With respect to claim 14, the modified wrapping machine of Boriani further include a plurality of suction belts (26) which meets all of applicant's claimed subject matter but lacks the specific teaching of the spacing between the suction belts gradually separates such that tension is placed on the wrapping sheet. However, it would have been obvious to a skilled person in the art, at the time of the invention, to have set the suction belts at an acute angle in order to spread the

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wrapping sheet to maintain the wrapping sheet at its original width and to keep the wrapping sheet wrinkle-free prior to wrapping the wrapping sheet onto the work piece for the same reason as applied to claim 11 above.

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Le Clair (US 2,597,877) as applied to claim 11 above; and further in view of Labine (US 2,930,173).

- With respect to claim 15, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three suction belts being provided. Labine teaches that wrapping material having wide width should be handled by at least three suction belts (26-27-26). It would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts, as taught by Labine, for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet. Regarding the limitation of the suction belt located in the center having a non-suction area in the vicinity of the transporting path of the work piece, Labine discloses Fig. 2 that the center suction belt (27) is configured to be shorter than the two outer suction belts (26) and has a non-suction area occupied by an idle pulley (40) in the vicinity of the transporting path of the work piece so that the work piece to be wrapped can pass under the center suction and along the transporting path of the work piece. Thus the modified wrapping machine of

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Boriani would also have a center suction belt being shorter than the two outer suction belts, wherein the center suction belt would have non-suction area occupied by an idle pulley in the vicinity of the transporting path of the work piece.

15. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Le Clair (US 2,597,877) as applied to claim 12 above; and further in view of Labine (US 2,930,173).

- With respect to claim 16, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three suction belts being provided. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet for the same reason as applied to claim 15 above.

16. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani et al. (US 5,782,063) in view of Bronander (US 2,155,398), further in view of Le Clair (US 2,597,877) as applied to claim 13 above; and further in view of Labine (US 2,930,173).

- With respect to claim 16, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three

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suction belts being provided. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet for the same reason as applied to claim 15 above.

17. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Bronander (US 2,155,398) and Le Clair (US 2,597,877) as applied to claim 14 above; and further in view of Labine (US 2,930,173).

- With respect to claim 18, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of at least three suction belts being provided. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided at least three suction belts for handling wrapping sheet of wider width if the work piece is substantially wide and requires such wider width wrapping sheet for the same reason as applied to claim 15 above.

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18. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Le Clair (US 2,597,877) as applied to claim 11 above; and further in view of Rodrigo (US 5,245,503).

- With respect to claim 19, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. It is known in the art that static charges exist on plasticized wrapping material web which attract dust particles, and in particular, these static charges do exist on wrapping sheet and tend to adhere the wrapping sheet to the work piece that would interfere with the wrapping process. Different types of device for eliminating static charge have been known in the art, Rodrigo discloses one such device that conveys a stream of ionized air in a fanned out distribution pattern over a work surface in order to eliminate the static charges on the work surface. Knowing that static charges on wrapping material would interfere with the wrapping process, it would, therefore, have been obvious to a skilled person in the art, at the time of the invention was made, to have further modified the wrapping machine of Boriani by having provided a device for eliminating static charges, such as one taught by Rodrigo, in order to eliminate the static charge on the wrapping sheet.

19. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245) further in view of Le Clair (US 2,597,877) as applied to claim 12 above; and further in view of Rodrigo (US 5,245,503).

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- With respect to claim 20, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with a device for eliminating static charges in order to eliminate the static charge on the wrapping sheet for the same reason as applied to claim 19 above.

20. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boriani et al. (US 5,782,063) in view of Bronander (US 2,155,398), further in view of Le Clair (US 2,597,877) as applied to claim 13 above; and further in view of Rodrigo (US 5,245,503).

- With respect to claim 21, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with a device for eliminating static charges in order to eliminate the static charge on the wrapping sheet for the same reason as applied to claim 19 above.

21. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borini et al. (US 5,782,063) in view of Jackson (US 2,098,245), further in view of Bronander (US 2,155,398) and

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Le Clair (US 2,597,877) as applied to claim 14 above; and further in view of Rodrigo (US 5,245,503).

- With respect to claim 22, the modified wrapping machine of Boriani meets all of applicant's claimed subject matter but lacks the specific teaching of an air guide for discharging de-electrification air. However, it would have been obvious to a skilled person in the art, at the time of the invention was made, to have provided the wrapping machine of Boriani with a device for eliminating static charges in order to eliminate the static charge on the wrapping sheet for the same reason as applied to claim 19 above.

Response to Arguments

22. Applicant's arguments filed 01/15/2009 have been fully considered but they are not persuasive. Applicant contends that the reference to Boriani et al. (US 5,782,063) does not disclose and/or teach a spreading guide provided on the periphery surface of the transit aperture of the delivery guide device, whose center area in the transverse direction protrudes toward the rear in a transporting direction of the work piece. This is not found persuasive because the reference to Boriani et al. does disclose a convex portion 45a provided on each of the upper & lower walls 45 of the transit aperture for gradually smoothing the wrapping sheet 4 as the work piece 3 is pushed through the transit aperture of the delivery guide device 33; the convex portion 45a is considered to be equivalent to the claimed spreading guide; wherein, the convex portion 45a, including its center area, protrudes from a downstream end of the transit aperture toward the upstream end of the transit aperture along the path 9 of the work piece 3. Thus the reference to Boriani anticipates the claimed invention as recited in claim 7.

Conclusion

23. **THIS ACTION¹ IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

24. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis K. Huynh whose telephone number is 571-272-4462. The examiner can normally be reached on M-F from 8:00AM to 3:00PM.

26. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

March 5, 2009

/Louis K. Huynh/
Primary Examiner
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